

## A TRIBUTE TO PROFESSOR MAURICE A. BERGOUGNOU



It was with great sadness that we learned of the death of Professor Maurice A. Bergougnou, Emeritus Professor of Chemical Engineering at the University of Western Ontario in Canada, on 30 November 2015 in his 88th year. Maurice will be most fondly remembered by everyone as a loving husband, father and grandfather, and as a caring mentor and welcoming friend.

Maurice was one of the founders of the fluidization community: he was very much involved over the last fifty years in the meetings and conferences of this community. In the early days, he was very much involved in the American Institute of Chemical Engineering (AIChE) Fluidization Group which was small at the time. He devoted a significant amount of his time in making sure that the sessions sponsored by this group were of the highest quality, and delivered important information to the community.

Maurice was born a poor farm boy in the south-west of France. In his youth, he was selected by the Jesuits to study at the Lycée Saint-Joseph de Tivoli in Bordeaux in occupied France during World War II. After the war, he graduated in 1953 from the French chemical engineering “school” ENSIC in Nancy. He then received a prestigious Fulbright Scholarship to study chemical engineering at the University of Minnesota under supervision of Professor E. L. Piret. Upon receiving his Ph.D. in 1958, Maurice joined Exxon in New Jersey and was instrumental in the development of fluidized beds and the catalytic cracking process in petroleum refining. In 1967, he accepted a professorship at the University of Western Ontario in London, Ontario, and moved to Canada. At Western, he was a pioneer in biofuel technology. In the late 1970's, he developed ultrapyrolysis, an innovative process which combines a jet impact mixer with a downflow reactor to convert organic materials into biofuels. Professor Bergougnou pioneered a very practical capstone design course which for many years set the standard in Canadian Engineering schools. Professor Bergougnou is fondly remembered by generations of engineering students for his inspirational teaching and the care and concern which he showed them. The excellence of his teaching and research was recognized by many awards throughout his career. In 1994, he became a Chevalier dans L'Ordre des Palmes Académiques in France and, in 1999, he was awarded the Killam Prize for Engineering for his "exceptional achievements in engineering research and world class contributions to the advancement of knowledge. In 2004, the “Maurice Bergougnou Lab” at Western was inaugurated to honor his huge contribution to the Faculty of Engineering with support from former students and industrial partners.

We do not know exactly the size of Maurice’s circle of friends. It is very large, composed of former students, colleagues at Western, engineers in industry and academics. To all those lucky and privileged enough to work with him, he passed on, in addition to his knowledge of fluidization, his own particular research style, based on constant questioning and curiosity, reflection and in-depth study, as well as a desire to be creative and see things through to completion.

Maurice’s research was world class. His work was of a very high quality and generally focused toward solving or understanding industrial problems. As a result, he saw many of his research and ideas adopted by industry.

As a French citizen, Maurice was very anxious to give back to France by using his considerable experience to educate and train French students and collaborate with French companies. During his French tours, he was regularly involved in the CPIC industrial training sessions in Nancy and at the IFP School (ENSPM). Collaborating with several French companies, he welcomed numerable French graduate students at Western.

Maurice Bergougnou had a very modest, kind, approachable character, with immense human qualities. He was motivated by the love of research and inspired by strong moral principles. Many visitors to London will forever remember his warm hospitality, often involving invitations to his house for a home-cooked meal and intense discussions, usually about politics or religion. The evenings were very collegial and enjoyable, punctuated with some very funny stories told by Maurice, who would laugh heartily at his own jokes.

The Fluidization XV community, therefore, wants to honor Professor Bergougnou's memory. We shall remember him as a great man, with immense charisma and deep humanity. He will be thoroughly missed.

Thierry Gauthier, Rob Ham, Ted Knowlton, Cedric Briens and Franco Berruti

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